

## KS3 Curriculum Plan IT

Year 7		
Autumn Term	<b>Topic</b> 1) Databases 2) Programming with Logo	<b>Brief description</b> <b>1) Database unit</b> Edit different parts of a database already created. Carry out filters and simple queries. Understanding simple Boolean logic such as AND, OR and NOT. Using Boolean Logic and Wild Cards in Searches. <b>2) Logo project</b> Learn instructions and create simple shapes. Use of a programming language to solve a problem. Use procedures and be able to explain how the procedure works and be able to test it. Undertake a project to achieve challenging goals.
Spring Term	<b>Topic</b> 1) Mission maker Computer game construction. 2) Networks and how Search Engines work	<b>Brief description</b> <b>1) Mission Maker Project.</b> Logical reasoning to evaluate performance trade-offs of using alternative algorithms to solve the same problem. Understand how computers can monitor and control physical systems. <b>2) How Search engines work and Networks</b> Understand how search engine results are selected and ranked. Understand the hardware and software components that make up networks, how they interact. How does different hardware and software affect cost and performance? Explain how networks such as the Internet work.
Summer Term	<b>Topic</b> 1) Desk Top Publishing 2) Micro Bit Programming	<b>Brief description</b> <b>1) Publisher Project</b> Create business advertising materials Undertake creative projects that involve selecting, using and combining multiple applications to achieve challenging goals. Create, reuse, revise and repurpose digital information. Understand what intellectual property is. Understand audience for a product. <b>2) Micro Bit Project Create code for the Micro Bit computers using different methods from Block code to Micro Python.</b> Use of a programming language to solve a problem. Use procedures and be able to explain how the procedure works and be able to test it. Undertake a project to achieve challenging goals.
Year 8		
Autumn Term	<b>Topic</b> 1) Databases 2) Go Control Project	<b>Brief description</b> <b>1) Database unit</b> Understanding simple Boolean logic such as AND, OR and NOT. Using Queries, Reports and Labels. Analyse data for the needs of a known user. <b>2) Go Control Project</b> Understand at least 2 Algorithms to solve the same problem. Use of a programming language to solve a problem. Use procedures and be able to explain how the procedure works and be able to test it. Undertake a project to achieve challenging goals. Understand how computers can monitor and control physical systems.

<b>Spring Term</b>	<b>Topic</b> <b>I&amp;2) Scratch Programming Project</b>	<b>Brief description</b> <b>I&amp;2) Scratch Programming project.</b> Understand at least 2 Algorithms to solve the same problem. Use of a programming language to solve a problem. Use procedures and be able to explain how the procedure works and be able to test it. Undertake a project to achieve challenging goals.
<b>Summer Term</b>	<b>Topic</b> <b>HTML Coding</b> <b>Serif Movie Plus</b>	<b>Brief description</b> <b>1) HTML Coding project.</b> Design, use and evaluate computational abstractions that model the state and behaviour of real world problems. Use of a programming language to solve a problem. Use procedures and be able to explain how the procedure works and be able to test it. <b>2) Serif Movie Plus Project.</b> Create a film for Year 6 students highlighting the dangers of the Internet and giving advice to a specific group. Undertake creative projects that involve selecting, using and combining multiple applications to achieve challenging goals. Create, reuse, revise and repurpose digital information. Understand what intellectual property is. Understand audience for a product.
<b>Year 9</b>		
<b>Autumn Term</b>	<b>Topic</b> <b>I&amp;2) Introduction to Computing</b>	<b>Brief description</b> <b>I&amp;2) Introduction to Computing.</b> Theory Lessons culminating in an internal test. Understand at least 2 Algorithms to solve the same problem. Use of a programming language to solve a problem. Use procedures and be able to explain how the procedure works and be able to test it. Undertake a project to achieve challenging goals. Understand the hardware and software components used to make a computer system work. Convert Binary and Denary numbers 0-15. State the output of different logic gates AND OR NOT. Know how to sequence instructions into a logical order. Candidates should have a knowledge and understanding of computing technology and how it's developed. The ethical, social and legal considerations.
<b>Spring Term</b>	<b>Topic</b> <b>I&amp;2) OCR Cambridge Nationals Multimedia Project</b>	<b>Brief description</b> <b>I&amp;2) OCR Cambridge Nationals R007 Film Project.</b> To complete the assessment of Unit R007 the learners will need the use of either, sound, movie or animation software. Learners will also need access to sourced assets e.g. music, sounds, graphics, video and text. Synoptic assessment is based upon demonstrating a broad understanding of the subject. This is achieved by drawing upon the skills/knowledge/understanding that have been studied across the specification and utilising them in an appropriate and relevant way to complete the assessment for this unit in order to meet the marking criteria for a specific Learning Outcome.

<b>Summer Term</b>	<b>Topic</b> <b>I&amp;2) OCR Cambridge Nationals Multimedia Project</b>	<b>Brief description</b> <b>I&amp;2) OCR Cambridge Nationals R007 Film Project.</b> To complete the assessment of Unit R007 the learners will need the use of either, sound, movie or animation software. Learners will also need access to sourced assets e.g. music, sounds, graphics, video and text. Synoptic assessment is based upon demonstrating a broad understanding of the subject. This is achieved by drawing upon the skills/knowledge/understanding that have been studied across the specification and utilising them in an appropriate and relevant way to complete the assessment for this unit in order to meet the marking criteria for a specific Learning Outcome.
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